

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

Claims 1-31 (Canceled).

Claim 32 (Currently Amended): A catoptric projection optical system ~~according to claim 23, wherein said catoptric projection optical system includes, in order of from the object surface to the image surface, for projecting a pattern on an object surface onto an image surface,~~ said catoptric projection optical system comprising six mirrors that include, in order from the object surface to the image surface and along an optical path of said catoptric projection optical system, a first mirror, a second mirror, a third mirror, a fourth mirror, a fifth mirror, and a six mirror to sequentially reflect light,

wherein the first mirror has a convex or plane shape, and the fifth mirror receives convergent pencil of rays,

wherein said six mirrors are arranged, in order a near distance along an optical axis from the object surface as follows: the second mirror, the first mirror, the fourth mirror, the sixth mirror, the third mirror and the fifth mirror,

wherein an intermediate image is formed between the fourth and third mirrors.

Claim 33 (Original): A catoptric projection optical system according to claim 32, wherein the intermediate image is formed between the fourth and sixth mirrors.

Claim 34 (Original): A catoptric projection optical system according to claim 32, wherein the intermediate image is formed between the six and third mirrors.

Claims 35-44 (Canceled).